AIRCOMMAND

OWNERS MANUAL

- **INSTALLATION**
- **COMMISSIONING OF UNIT**
- **SPECIFICATIONS**
- **OPERATING INSTRUCTIONS**

WARRANTY OF REFRIGERATED AIRCONDITIONING

Warranty within Australia

We undertake by this warranty to rectify, free of charge, at our nearest authorised service agent, any fault due to faulty workmanship or replacement of any faulty components
within 12 months **from the date of the first retail purchase thereof.** This undertaking is conditional upon the appliance being installed and operated in accordance with our instructions, and does not apply to consumable components such as filters, or to adjustments necessary due to misuse of airconditioner. Normal user maintenance, setting of controls and transit damage are also excluded. No other person, firm or corporation is authorised by us to offer or give on our behalf any other or greater warranty
than that given by us under this warranty. The benefits conferred by this warranty are in favour of the original retail purchaser and any other person deriving title to the goods through or under such person and are intended to be separate from the additional to all other rights and remedies which they may have in law in respect of the goods.

1. In the event that warranty service is required, the purchaser **must** contact Aircommand Australia for service approval.
   Contact information: phone +61 8 8445 2877, fax 08 8243 0628, or email sales@aircommand.com.au
2. Warranty repairs will only to be carried out by the **manufacturer's authorised service repairer.**
3. It is the purchaser's responsibility to **deliver** unit to the manufacturer's nearest authorised Service Centre.
   The manufacturer will not bear any costs involved in Service Agent's travelling expenses or delivery charges.

Warranty outside Australia

1. Aircommand products are covered by 12 months warranty from date of first retail purchase.
2. For warranty enquiries outside Australia, please contact your national supplier .

** The warranty card must be completed and returned to the manufacturer for registration, or to the distributor in country of purchase. Online warranty registration is available at www.aircommand.com.au/registration.html*

GARANTIE FÜR KLIMAGERÄT MIT KÜHLFUNKTION

Garantie innerhalb Australiens

Wir verpflichten uns mit dieser Garantie, innerhalb von 12 Monaten **ab Datum des ersten Einzelhandelskaufs**, über unseren nächsten Vertragshändler jeden durch fehlerhafte Verarbeitung entstandenen Defekt kostenlos zu beheben oder alle defekten Teile kostenlos auszutauschen. Diese Verpflichtung gilt unter dem Vorbehalt, dass das Gerät im Einklang mit unseren Anleitungen installiert und betrieben wird, und gilt nicht für Verschleißteile wie z.B. Filter oder für Korrekturarbeiten, die durch den Missbrauch des Klimageräts bedingt sind. Normale Wartung durch den Benutzer, die Einstellung der Bedienelemente und Transportschäden sind ebenfalls ausgeschlossen. Wir haben keine anderen Personen, Firmen oder Unternehmen bevollmächtigt, in unserem Namen irgendeine andere oder weiter reichende Garantie anzubieten oder zu geben als die von uns im Rahmen dieser Garantie erteilte. Die mittels dieser Garantie gewährten Leistungen gelten zu Gunsten des ursprünglichen Einzelhandelskäufers oder jeder anderen Person, die ihren Anspruch auf die Waren durch oder von dieser Person ableitet, und sind dazu gedacht, getrennt von allen zusätzlichen Rechten und Behelfen zu gelten, die ihnen kraft Gesetzes hinsichtlich dieser Waren zustehen..

1. Für den Fall, dass eine Garantieleistung erforderlich wird, muss sich der Käufer mit Aircommand Australia zur Genehmigung der Leistung in Verbindung setzen. Kontaktinfo: Tel. +61 8 8445 2877, Fax: 08 8243 0628 oder E-Mail: sales@aircommand.com.au
2. Unter die Garantie fallende Reparaturen werden nur durch den **Vertragsreparaturdienst des Herstellers** ausgeführt.
3. Die **Lieferung** des Geräts an das nächstliegende Service Centre des Herstellers ist Aufgabe des Käufers.
   Der Hersteller deckt keine der durch die Anfahrtskosten des Vertragsdienstes oder Lieferkosten entstandenen Ausgaben.

Garantie außerhalb Australiens

1. Für die Produkte von Aircommand gilt eine 12-monatige Garantie ab Datum des ersten Einzelhandelskaufs.
2. Für Garantieanfragen außerhalb Australiens wenden Sie sich bitte an Ihren inländischen Händler.

** Die Garantiekarte ist auszufüllen und dem Hersteller, bzw. dem Vertriebshändler im Einkaufsland, zur Registrierung zuzuschicken. Die Garantie kann online unter der folgenden Adresse registriert werden: www.aircommand.com.au/registration.html*

GARANTIE DE CLIMATISATION RÉFRIGÉRÉE

Garantie pour l'Australie

Nous nous engageons par cette garantie à faire rectifier gratuitement par notre agent de service tout défaut résultant d'un défaut de fabrication ou de remplacer tout composant défectueux dans les 12 mois suivant la date du premier achat de l'appareil au détail. Cet engagement est conditionnel à l'installation et à l'exploitation de l'appareil conformément à nos instructions, et ne s'applique pas aux composants consommables tels que les filtres, ou à un réglage attribuable à la mauvaise utilisation du climatiseur. L'entretien, les réglages des commandes et les dommages en transit sont également exclus. Aucune autre personne, firme ou entreprise n'est autorisée par nous à offrir ou à donner en notre nom toute autre garantie ou une garantie supérieure à celle donnée par nous en vertu de cette garantie. Les avantages conférés par cette garantie reviennent à l'acquéreur au détail original ou à toute autre personne qui deviendra propriétaire de l'appareil par le biais de cette personne ou avec son autorisation et sont censés être supplémentaires à tous les autres droits et recours dont il pourra disposer légalement en ce qui concerne l'appareil.

1. Au cas où un service de garantie serait nécessaire, l'acquéreur doit contacter Aircommand Australia pour obtenir une autorisation de service.
   Cordonnées: téléphone +61 8 8445 2877, fax 08 8243 0628, ou email sales@aircommand.com.au
2. Les réparations sous garantie seront effectuées exclusivement par le **réparateur autorisé du fabricant.**
3. La responsabilité incombe à l'acquéreur de livrer l'appareil au Centre de service autorisé le plus proche du fabricant.
   Le fabricant ne subira pas les frais de déplacement ou de livraison de l'agent de service.

Garantie en dehors de l'Australie

1. Les produits Aircommand sont couverts par une garantie de 12 mois à compter de la date du premier achat au détail.
2. Pour toute demande de renseignements en dehors de l'Australie, veuillez contacter votre fournisseur national.

** La carte de garantie doit être remplie et renvoyée au fabricant pour être enregistrée, ou au distributeur dans le pays de l'achat. Un enregistrement de garantie en ligne est*
disponible sur www.aircommand.com.au/registration.html

GARANTÍA DEL ACONDICIONADOR DE AIRE REFRIGERADO

Garantía en Australia

Nos comprometemos por medio de esta garantía a rectificar, sin cargo, en nuestra agencia de servicio autorizado, cualquier fallo causado por un componente defectuoso dentro de los 12 meses contados **a partir de la primera fecha de compra**. Este compromiso es condicional a que el aparato haya sido instalado y operado de acuerdo con nuestras instrucciones y no cubre componentes de consumo tales como filtros, o cualquier ajuste necesario debido al uso incorrecto del acondicionador de aire. Se excluyen también las tareas de mantenimiento normales, el ajuste de los controles y cualquier daño ocurrido durante su transporte. Ninguna otra persona, firma o corporación está autorizada a ofrecer o dar en nuestro nombre una garantía más extensa o diferente a la otorgada por esta garantía. Los beneficios conferidos por esta garantía son a favor del comprador original y cualquier otra persona que tenga derecho al título de la mercadería a través o bajo dicha persona y está separada de otros derechos adicionales o soluciones a las que puedan tener derecho, según la ley, respecto a las mercaderías.

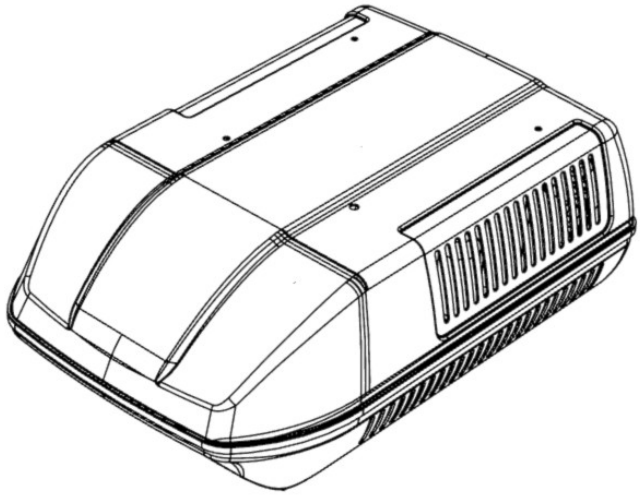
1. En el caso que se necesite hacer uso del servicio de garantía, el comprador **debe** ponerse en contacto con Aircommand Australia para la aprobación del servicio. Información de contacto: Teléfono: +61 8 8445 2877, Fax 08 8243 0628 o Email sales@aircommand.com.au
2. Las reparaciones cubiertas por la garantía deberán ser llevadas a cabo por el **servicio de reparaciones autorizado por el fabricante.**
3.. **La entrega** de la unidad al Centro de Servicio más cercano autorizado por el fabricante es responsabilidad del comprador
   El fabricante no se hará responsable de ninguno de los costes involucrados por gastos de viaje o cargos de entrega por parte del agente proveedor del
   servicio

Garantía fuera de Australia

1. Los productos de Aircommand están cubiertos por 12 meses de garantía a partir de la primera fecha de compra.
2. Por cualquier información respecto a la garantía fuera de Australia, sírvase ponerse en contacto con su proveedor nacional.

** Esta tarjeta de garantía debe ser completada y enviada al fabricante para su debida registración o alternativamente al distribuidor en el país de compra. La registración de la garantía puede hacerse también online en: www.aircommand.com.au/registration.html*

INSTALLATION & OPERATING INSTRUCTIONS FOR CORMORANT MKII ROOFTOP AIRCONDITIONER



Model Number: _____.

Serial Number: _____.

Date Purchased: _____.

⚠ WARNING

It is important that this installation manual is properly read and understood before installation. The unit must be installed by a qualified service technician. Failure to properly install the unit or attempting to modify it in any way can be extremely hazardous and may result in property damage and personal injury.

Aircommand will not be held responsible for problems relating to incorrect or improper installation methods.

For warranty claims, sales enquires or customer service

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service@atwoodmobile.com

GENERAL CORMORANT UNIT INFORMATION

I. PURPOSE

The Aircommand CORMORANT air conditioning unit is designed for installation on the roof of a caravan or recreation vehicle to provide reverse cycle heating and cooling

-The roof must be capable of supporting the weight of the unit (45kg)
-The absolute *minimum* thickness of the roof must not be less than 25mm
-The *maximum* thickness of the roof must not exceed 125mm
-Trimming of the ductwork and/or bolts may be necessary depending on the roof thickness

It is important that the unit is installed properly and according to the recommended guidelines.
Aircommand will not be held responsible for problems relating to incorrect or improper installation methods.

II. ENSURING EFFECTIVE OPERATION

The effectiveness of the air conditioner is dependent on several factors e.g. size and heatload of the van. When an Aircommand unit is installed in a van or motorhome Aircommand assumes that the vehicle is well insulated (25mm of foam minimum) in all walls and roof, that the windows are of moderate size (preferably double glazed) and the roof hatches are moderate, insulated and airtight when closed. Other methods of reducing heatload include:

-Closing all doors, hatches, windows and blinds
-Position the vehicle so if an annex is used, it will face the sun and protect the windows from direct radiation
-Turning off appliances that might increase the heatload
-Ensuring the caravan/RV is parked in a shaded position

In periods of extreme high temperature it is recommended to start the air conditioner earlier in the morning to greatly improve its ability to cope with the expected high heat load.

III. CONDENSATION

In areas of high humidity, the humid air within the van will cause “sweating” or condensation in parts of the unit as the humid warm air contacts the colder air discharge system. If this occurs please ensure the following:

-Closing all doors, hatches, windows and blinds to limit the ingress of warm humid air

During operation the air conditioner will remove large quantities of water from the inside air and if warm humid outside air is limited, then so the condensation will reduce greatly. Avoid running the inside fan on LO or AUTO in such conditions. Running the fan on HI fan speed will result in higher airflow and reduce the tendency to have condensation form.
Aircommand will not be held responsible for damage caused by condensation

IV. GENERATORS

The CORMORANT unit is equipped with a gen kit that allows it to be started using a generator. Any generator used should have a steady full sine wave at 50hz, and be able to handle the compressor start up demand. However given the vast range in quantity and quality of generators on the market, Aircommand cannot recommend a specific model or brand. We do suggest a *minimum* output of 2.8 Kw. This recommendation does not include allowances to run auxiliary equipment e.g. Battery chargers, water heaters etc.
Aircommand will not be held responsible for damages due to the use of improper generators and such use may void your warranty

INSTALLATION PARTS LIST

MAIN COMPONENTS

1) CORMORANT MkII Rooftop Airconditioner

2) Roof Seal Gasket 2 Pce

3) Spigot

4) Extension Duct

5) Brace Assembly

6) Plenum

7) Plenum Filters x2

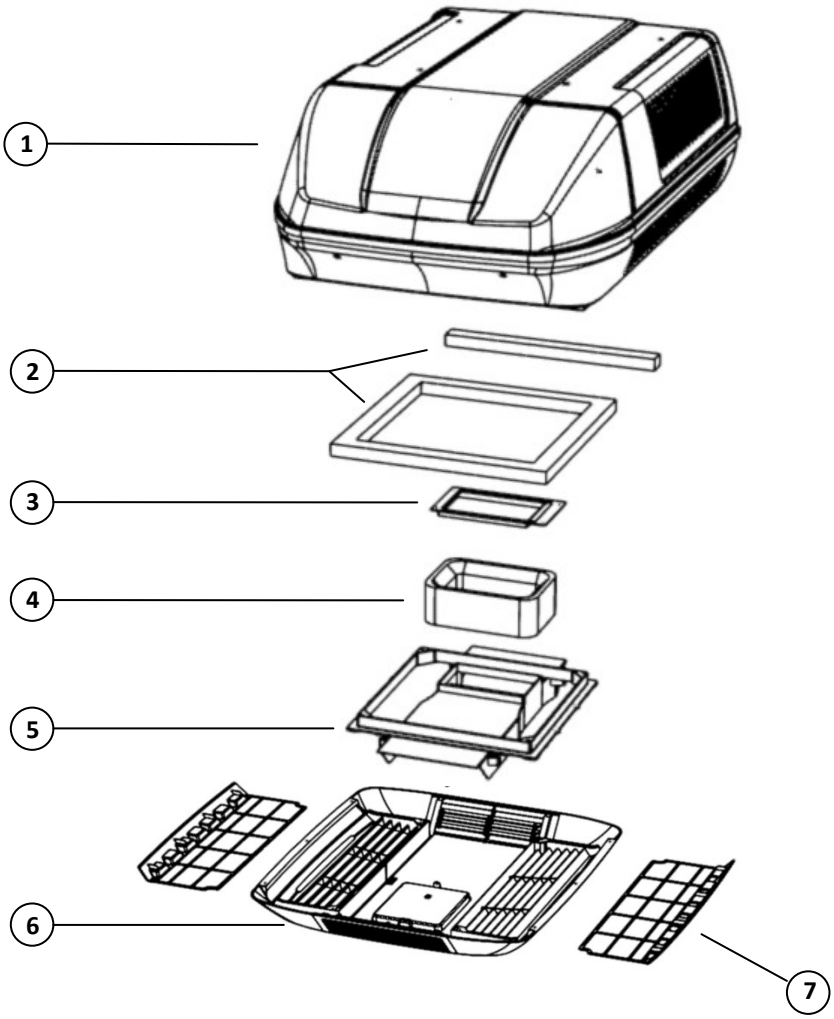
FITTINGS & FIXTURES

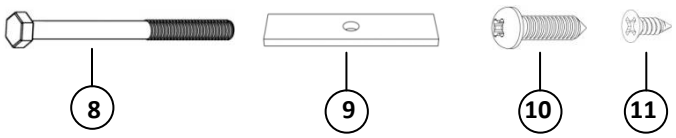
8) M8 Bolts x 4

9) Hold Down Bars x 4

10) Plenum Cover Screws x 4

11) Self Tapping Screws x 6





BEFORE INSTALLATION

Ensure that the installation instructions have been properly read and understood

Installation must conform nationally to wiring regulations and in particular AS3001 – 2008

DO NOT attempt to modify or add components to the installation procedure

This equipment must only be serviced by a licensed refrigeration mechanic

If your installation varies from the method outlined please contact Aircommand for specialty advice

⚠ WARNING

Failure to properly install the unit or attempting to modify it in any way can be extremely hazardous and may result in property damage and/or personal injury

Aircommand will not be held responsible for issues arising from incorrect or improper installation methods

1. INSTALLATION POSITION

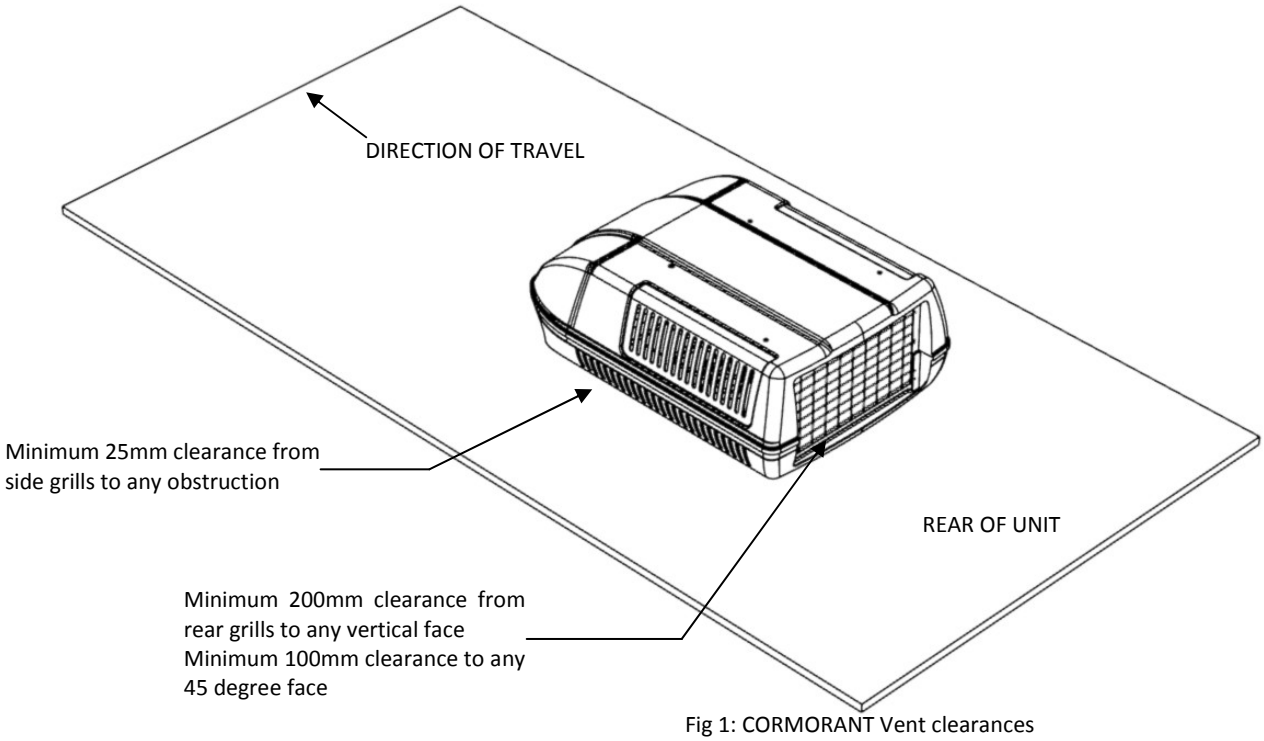

DIRECTION OF TRAVEL
Minimum 25mm clearance from side grills to any obstruction
REAR OF UNIT
Minimum 200mm clearance from rear grills to any vertical face
Minimum 100mm clearance to any 45 degree face

Fig 1: CORMORANT Vent clearances

Before beginning, mark out the position of the unit considering the following important requirements:

- The air conditioner should be situated as centrally as possible on the van, to ensure even air distribution.

- The front of the unit **MUST** face the direction of travel; failure to follow this instruction will result in damage to the condenser fans.

- If the caravan is over 23' in length, or has an unusually high heat load (see General Operating Information section regarding expectations about insulation etc.), Aircommand would recommend 2 or more units to cool effectively.

- When considering the installation position remember to check for clearance around the plenum inside the van.

- Avoid an installation position where a bulkhead, cupboard or light fitting could interfere with the discharge air flow from the plenum.

It is important that the unit is never more than 5° from the horizontal and the rear of the unit should never be higher than the front

- Contact Aircommand if your installation differs significantly

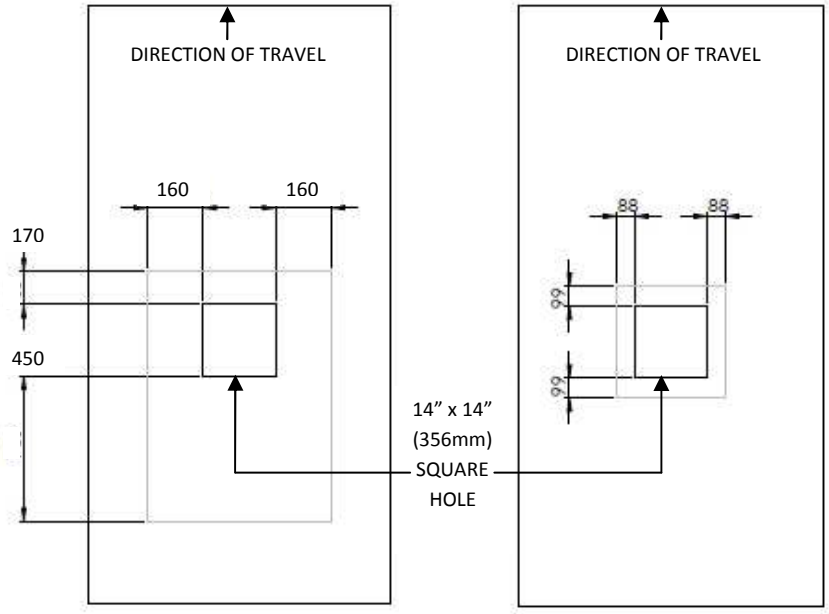


Fig 2: The foot print of the rooftop unit, and the plenum, measured from the hole

- The above outline on the left shows the minimum clearance required around the CORMORANT unit on the roof of the vehicle, distances shown are calculated from a 14" square hole (356 x 356mm)

- The above outline on the right shows the minimum clearance required around the Plenum located on the ceiling inside the vehicle, distances shown are calculated from a 14" square hole (356 x 356mm)

2. ASSESS ROOF STRENGTH

- The roof members **MUST** be strong enough to support the weight of the unit (up to 45kg) without any roof deflection that will cause "pooling" of water around the unit. Contact your caravan manufacturer to confirm the max load the roof is able to handle. If in any doubt consider the use of an external "H" frame.

- If the roof does not have an existing hole one must be cut. Cut from the roof then use the roof hole as a guide to cut through the ceiling. Contact your caravan manufacturer for the best method to cut through the roof.

- The square hole in the roof (356 x 356mm, 14" x 14") **MUST** be boxed up with minimum 20mm square timber to provide a structure strong enough to withstand the compression of the installation bolts. This is also to ensure that air in not drawn from the roof cavity (Fig 3 & 4). Remember to leave access for wiring.

- Longitudinals **MUST** be fixed securely to the transverse roof members to transfer load (see Fig 3).

⚠ WARNING

There may be electrical wiring located between the roof and ceiling. Ensure that power is properly disconnected at the supply (mains and/or battery). Failure to do so may result in personal injury or death

TIP: Always use crawl boards across the roof to avoid damage

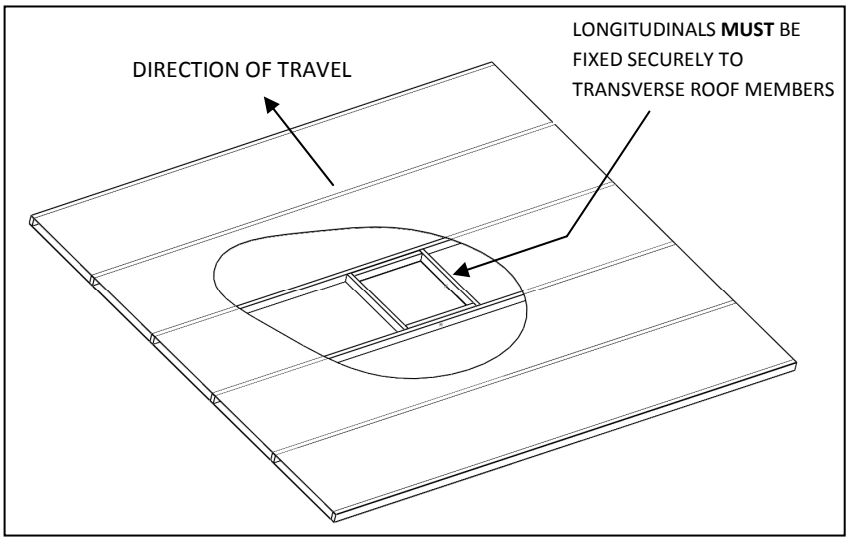


Fig 3: Shows an ideal roof structure with strong longitudinals and a 14' hole boxed

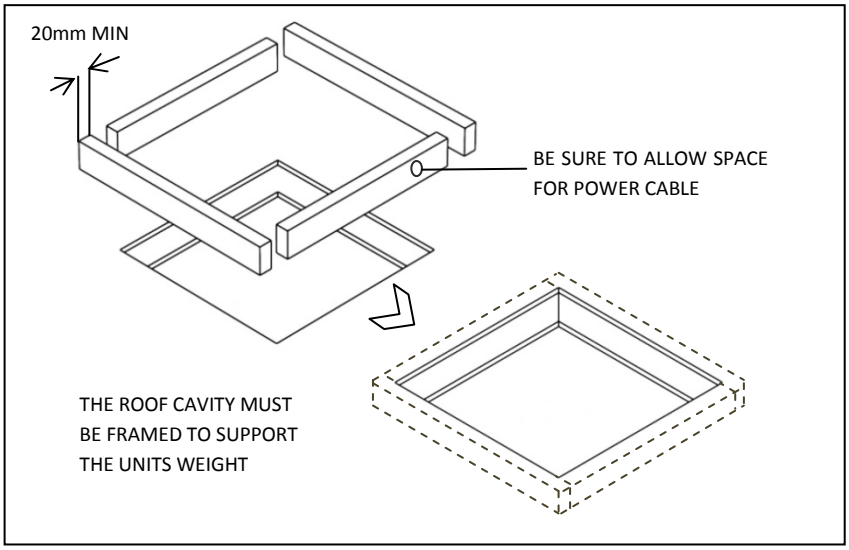


Fig 4: The roof cavity **MUST** be boxed with timber to provide a solid structure

3. INSTALLING ROOF GASKET

- Ensure that the roof is clean, dry and free from grease or oil.

- Remove the paper backing from gasket and position over square hole. Second gasket to be located 250mm behind and parallel (Fig 5)

- Gasket must be applied with self-adhesive side down. Note orientation of gasket to direction of travel (Fig 5). Press gasket down to ensure good adhesion.

- Run a bead of silicone where the roof and the gasket meet, around the entire gasket perimeter, to ensure water cannot leak between the gasket and the roof surface. DO NOT apply silicone between the gasket and the air conditioner itself.

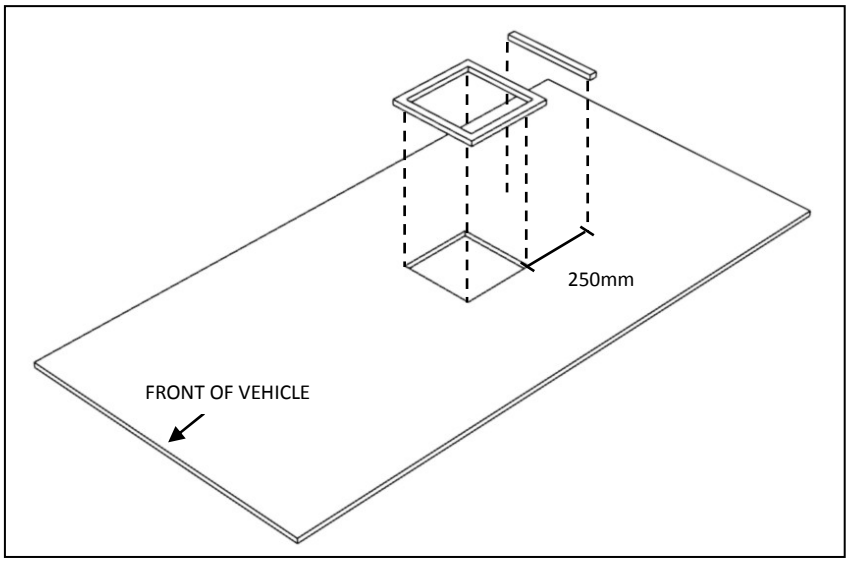


Fig 5: Shows the placement of the roof gasket over the hole. Note the positioning in relation to the front of the vehicle

4. POSITION CORMORANT ON ROOF

- Remove the air conditioner from the carton.

- Position the unit over the gasket so that the corners of the square hole in the caravan roof line up with the corners of the square hole underneath the CORMORANT (Fig 6).

TIP: Have one person inside the vehicle looking through the hole while the other is on the roof adjusting the position of the unit

The unit weights approximately 45kg. Ensure a two person lift or use a mechanical hoist to avoid the risk of injury.

- DO NOT slide the unit on the roof, this may damage the gasket and result in leaks

- Four M8 mounting holes on the chassis underneath the air conditioner will line up with the corners of the square roof hole (Fig 7).

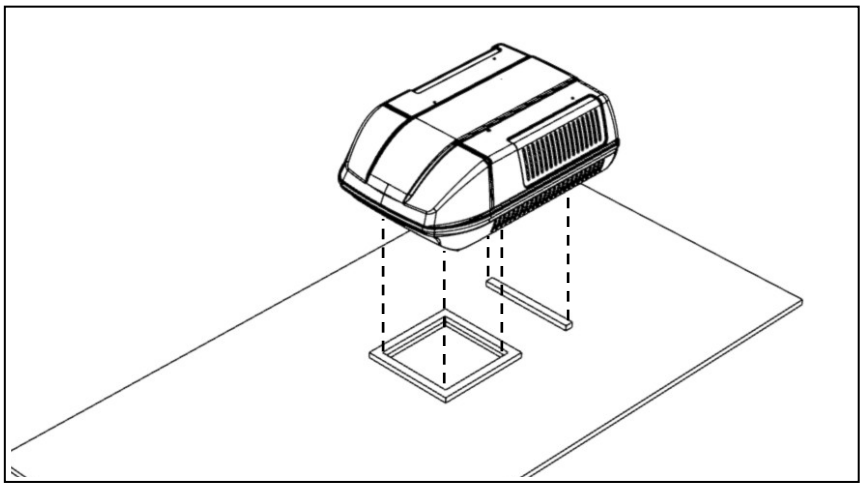
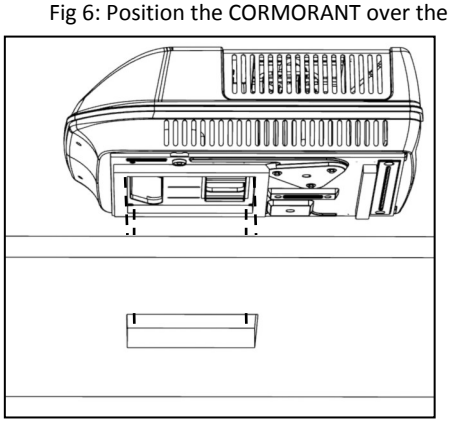


Fig 6: Position the CORMORANT over the roof gasket and set it down gently



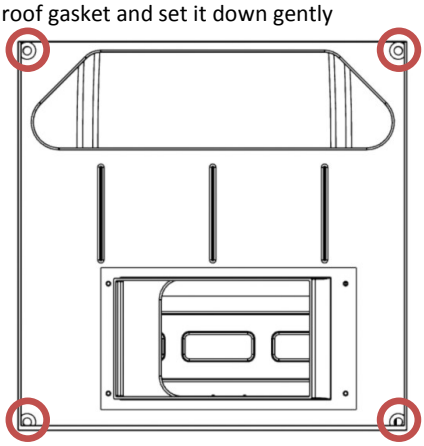
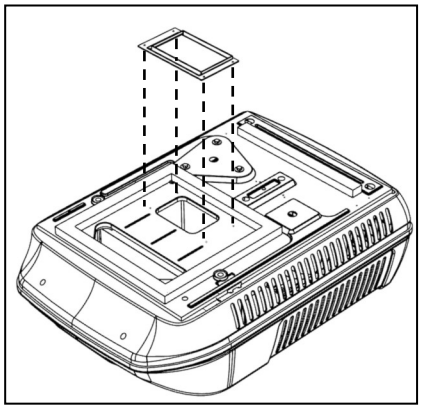


Fig 7: Shows the view from under the roof
Position the CORMORANT so the 4 mounting holes (circled) line up with the corners

5. ATTACH SPIGOT TO UNIT

- Screw spigot onto underside of unit with the 4 screws provided
(this step can also be done before the unit is positioned on the roof but take care not to damage while fitting)

- The spigot will only fit one way, be careful to ensure spigot is positioned correctly (Fig 8) and avoid affixing back to front



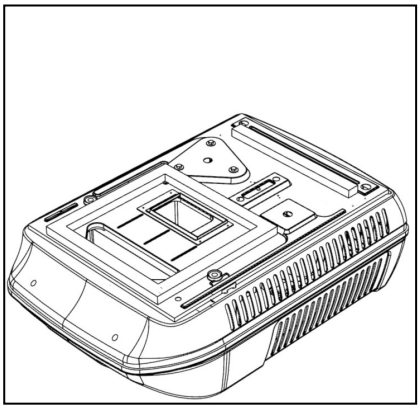


Fig 8: Shows positioning of Spigot to be attached to underside of unit. Ensure spigot is mounted the correct way, screw holes will not line up if attached back to front

6. CONNECT ELECTRICAL SUPPLY

- This unit **MUST** be installed in accordance with State and National Wiring regulations and in particular AS3001 – 2008

- Connect power supply to lead from unit

- Note: Brown – Active,
Blue – Neutral Yellow/Green - Earth

⚠ WARNING

Ensure that power is properly disconnected at the supply (mains and/or battery). Failure to do so may result in damage to the unit and personal injury or death.

7. ASSESS ROOF THICKNESS

- Measure the roof thickness and consult the table across to check if adjustments to the hold down bolt and duct length are required.

Failure to cut the duct properly can result in an incorrect seal which will adversely affect the units performance

Roof thickness (mm) *Include 'H' frame if used*	Duct length required (mm)	Hold down bolt length required (mm)
125	145 (as supplied)	As supplied
100	120 (cut 25)	As supplied
80	100 (cut 45)	As supplied
60	80 (cut 65)	Cut 50
40	60 (cut 85)	Cut 70
25 (absolute minimum)	40 (cut 100)	Cut 85

8. ASSEMBLE DUCT

- Thread a hold down bar onto the M8 bolt and push the bolt almost all the way into the hole in each corner of the brace (Fig 9)

- Leave a 10mm gap between the hold down bar and the recess in the plastic brace. This will allow for easier engagement with the four corresponding threaded holes in the unit.

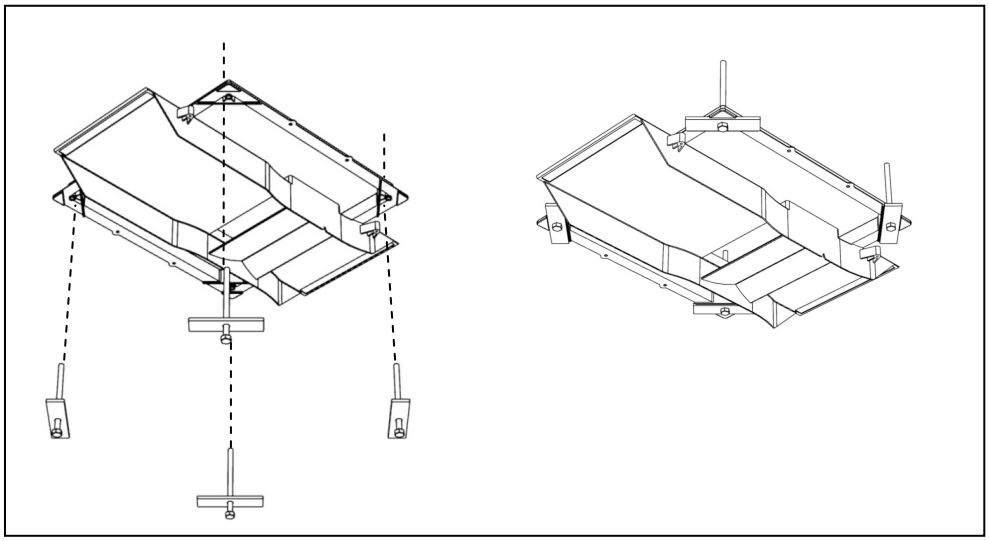


Fig 9: Insert the four M8 bolts and hold down bars into the corners of the brace

- Turn the assembly over and add the extension duct to the top of the assembly (Fig 11).

- Take care to avoid tearing or ripping the duct apart.

When attaching the duct to the unit take care to ensure it forms a tight, unbroken seal that doesn't allow discharge air to escape.

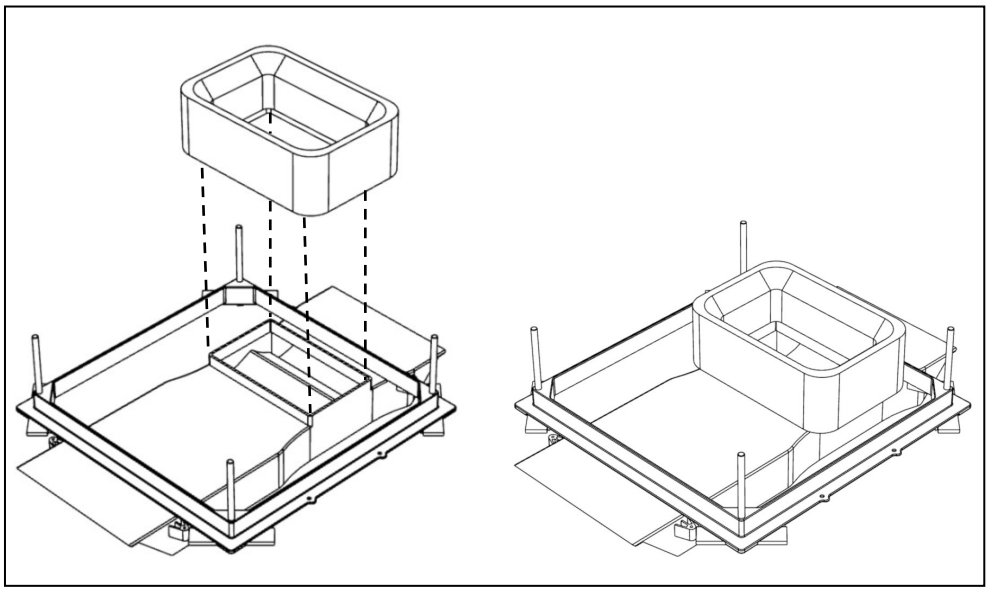


Fig 10: Fit the extension duct onto the brace assembly ensuring a tight, sealed fit

9. ATTACH DUCT TO UNIT

- Raise the brace assembly and slip the extension duct over the outside diameter of the spigot underneath the rooftop unit. (Fig 11 & 12).

When attaching the duct to the unit take care to ensure it forms a tight, unbroken seal that doesn't allow discharge air to escape.

- Engage and tighten the four M8 bolts with the threaded inserts in the rooftop unit.

- Recommended tightening torque of the bolts is 7 N.m (5.2 lb-ft). As a rough guide the bolts should be tightened so that the unit compresses the roof seal gasket to approximately half its height.

- As the bolts are tightened ensure that the hold down bars slot into their recesses in the brace (Fig 12).

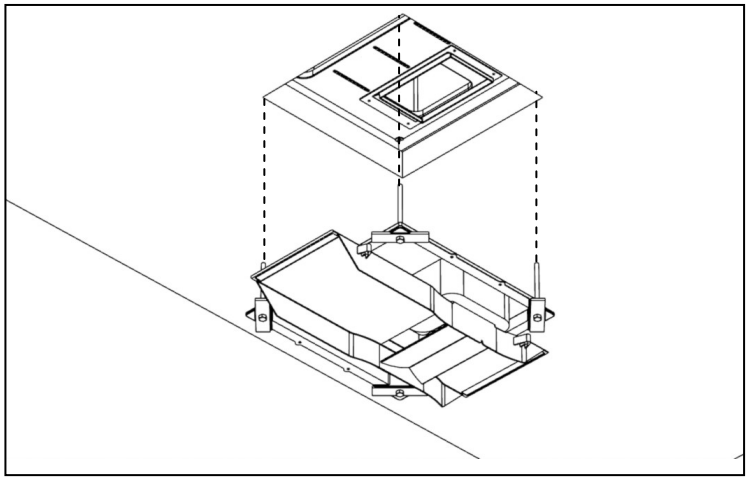


Fig 11: Raise the duct assembly up to the roof hole, ensuring the paper extension duct work forms a tight fit around the spigot underneath the unit.

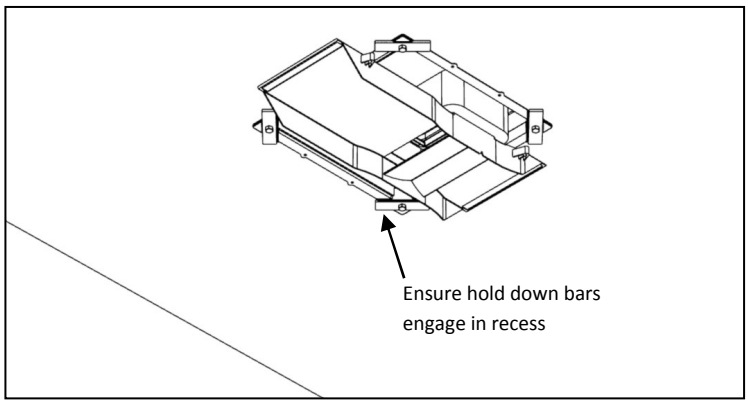


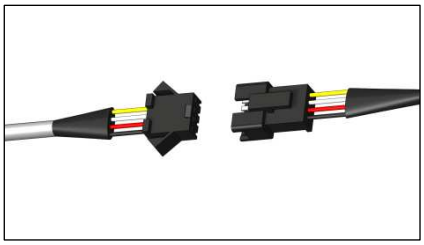
Fig 12: Then engage the four M8 bolts, taking care to ensure the hold down bars slot into their recesses

10. ATTACH PLENUM COVER

- Connect the main cover of the plenum to the duct by attaching the blue suspension cord to the lug on the inside of the cover (Fig 13). Reach into the unit, grab the control cable plug and pull down to

-This will allow you to use two hands to connect the control cable (see Fig 14).

- Connect the key pad control cables together (see below). Be sure that the plug joins the corresponding wire colours together (yellow to yellow, red to red etc.)



Failure to properly plug the control cables together correctly will result in loss of power to display

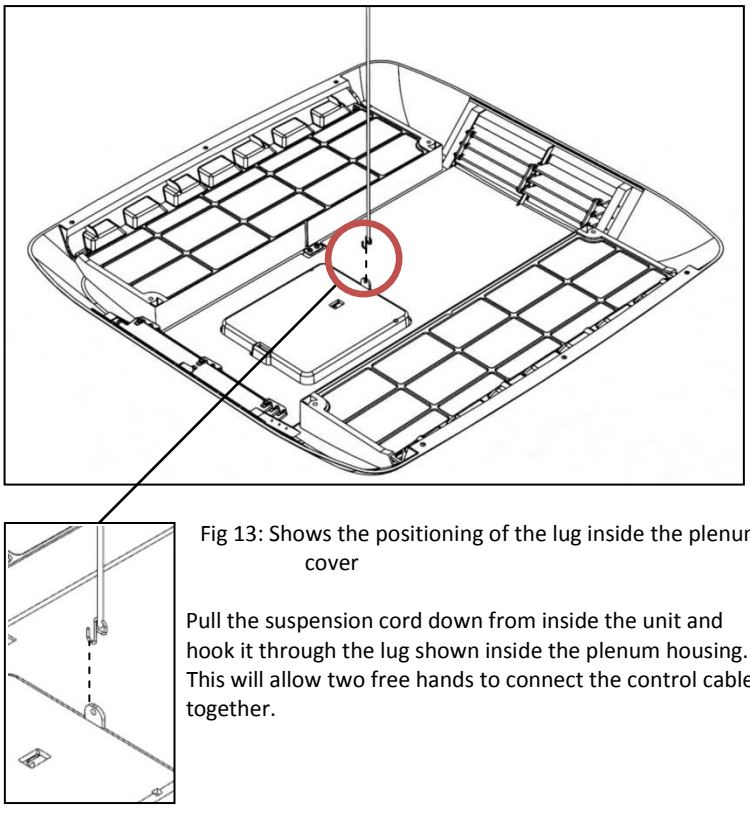


Fig 13: Shows the positioning of the lug inside the plenum cover

Pull the suspension cord down from inside the unit and hook it through the lug shown inside the plenum housing. This will allow two free hands to connect the control cables together.

11. ATTACH PLENUM COVER

- Secure the main plenum cover to the duct assembly with the 4 screws provided (Fig 15).

TIP: It is important that these screws are not over tightened otherwise the plenum may crack.

- Remove the filter elements by pulling them out of the plenum, and use the six self-tapping counter sunk screws to secure the covers edges to the caravan ceiling (Fig 16). In some instances a very small pilot hole may need to be drilled to guide the screws into place.

- Replace the return air filters by sliding them into the plenum until they click into place

-Your installation is now complete.

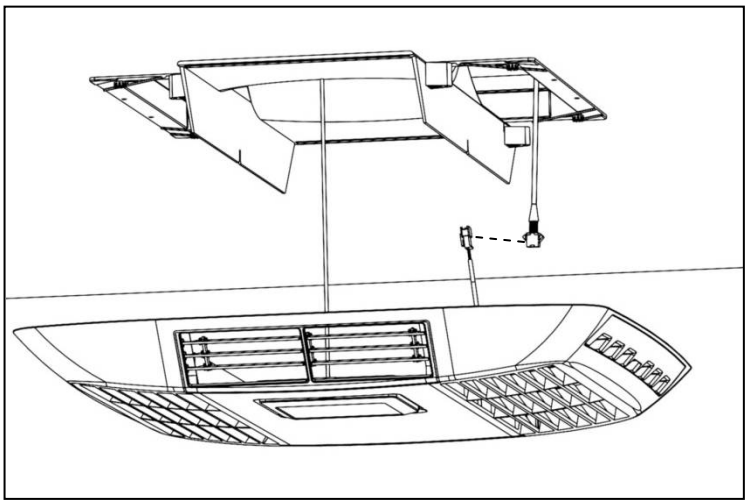


Fig 14: Attaching the suspension cord will allow two hands free to plug in the control cable and affix the plenum

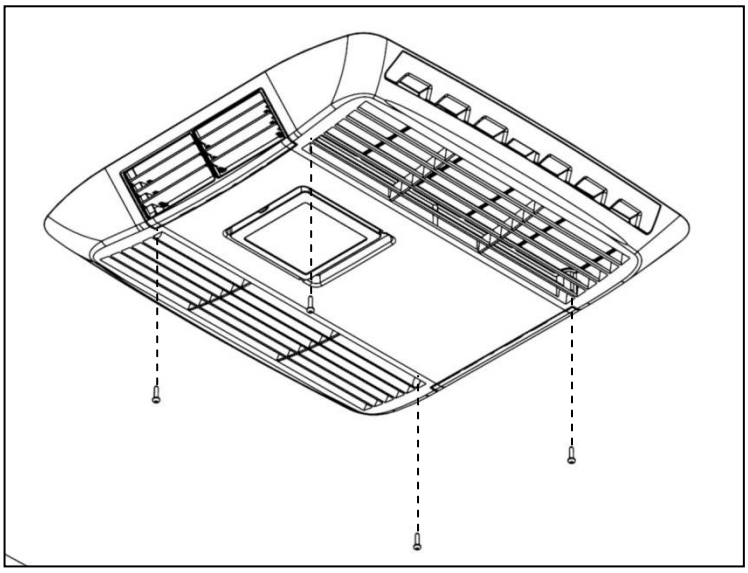


Fig 15: Secure the main plenum cover to the duct assembly with the four screws provided

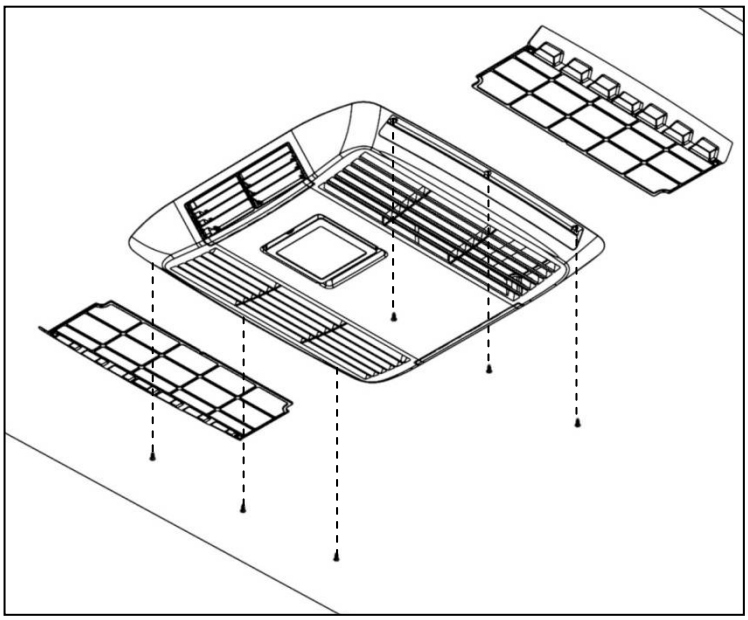


Fig 16: Remove the plenum filters and use the six self-tapping screws to secure the plenum over to the ceiling of the caravan. Be sure not to over tighten.

INSTALLATION IS NOW COMPLETE

COMMISSIONING OF THE UNIT

1. Turn the power on at the circuit breaker

2. Press the ON/OFF button and press the MODE button to select FAN

3. Cycle through the LO, MED and HIGH fan speeds checking that all speeds run.

4. Set mode to COOL, adjust temp via up/down buttons to at least 3oC **less** than the display temp (I.e. Room temp) compressor will start within three minutes.

5. Set mode to HEAT, similarly set temp to at least 3oC **above** display temp. Compressor will start within three minutes. After a few minutes the fan will start and warm air will be apparent.

N.B. Regardless of the mode selected there will always be at least a 3 minute delay before the compressor starts.

MAINTENANCE

I. Plenum Filters

The plenum filters are the only parts that require routine maintenance. They must be cleaned periodically to ensure that they do not become clogged with dust and other particles.

To clean the two plenum filters, first remove them both from the plenum by pulling them out of the assembly.

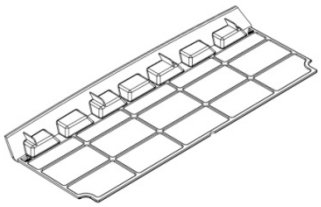


Fig 17 shows the plenum filter when removed

The state of the filters can be ascertained from its appearance, the filters are translucent, and if they appear clogged then they should be cleaned. Generally the filters can be cleaned sufficiently by tapping them together to shake loose the dust and particles trapped inside.

⚠ WARNING

Airborne particles can pose a health risk, particulalry to young children and the elderly. Ensure that filters are cleaned in a safe and well ventilated area

If a more thorough clean is required then the filters can be washed out using warm soapy water. Care must be taken to avoid ripping the fabric.

The filters should be cleaned every two weeks or more when in use. Prolonged use, higher concentrations of airborne particles and various other factors may result in the filters needing to be cleaned more often.

Replacement filters can be ordered directly from Aircommand.

II. Mounting Bolts

Aircommand suggests that the hold down bolts are initially checked for tightness within the first 3 months of installation, and thereafter every 12 months if the van is in constant use.

III. Storage

The air conditioner should be run on a routine basis to ensure the components remain in working order.

If the van is in storage or is to remain unoccupied for an extended length of time it is recommended than the air conditioner is allowed to run uninterrupted for 20-30min once every six months.

For long term storage outdoors, or to protect your CORMORANT from winter storms and weathering when not in use, a protective cover can be purchased from Aircommand, please call for details.

IV. Warranty Claims

The unit comes with a one year manufactures warranty from date of purchase. It is **IMPORTANT** that you read and understand the conditions of the warranty agreement which are included with the unit.

If you have a claim please contact Aircommand directly on (08) 8345 8444 alternatively you can fax (08) 8243 0628 or email service@aircommand.com.au
Please have your unit serial number ready

GENERAL SPECIFICATIONS

Air – Conditioner

Height	-	325mm
Width	-	675mm
Length	-	975mm
Weight	-	45kg

Air Discharge Plenum

Height	-	65mm
Width	-	535mm
Length	-	555mm
Weight	-	2.4kg

CORMORANT MODEL:	**240V 50Hz Heatpump**	**115V 60Hz Cooling Only Model 13500**	**115V 60Hz Heat Pump Model 15000**
Electrical Rating:	240V, 50Hz	115V, 60Hz	115V, 60Hz
Nominal Cooling Capacity:	3.5 KW	13,500 BTU/Hr	15,000 BTU/Hr
Nominal Heating Capacity:	3.5 KW	n/a	15,000 BTU/Hr
F.L.A. Cooling:	5.6 A	12.5 A	13.0 A
F.L.A. Heating:	5.2 A	n/a	13.0 A
Locked Rotor Amps:	32 A	44 A	45 A
Refrigerant:	R410A	R410A	R410A
Charge:	630 grams	22 Oz	22 Oz
Inside Air Delivery Maximum:	140 l/s		
Total Installed Weight:	48 Kg	106 lb	108 lb

OPERATING INSTRUCTIONS

- Turn the unit on by pressing the ON/OFF button once.
- Press the MODE button to cycle through options Cool, Dry, Heat and Fan.

COOLING

- Cycle mode button to highlight COOL.
- You may select High, Med, Low or Auto fan speeds by pressing the fan button. It is recommenced that you choose Auto.
- Now select the desired room temperature (herein referred to as SETPOINT) by pressing the TEMP up or down keys, the readout will flash the set point temperature. Keep pressing the button until it flashes your desired set point. In approx. 5 seconds the display will resume reading the actual room temperature. The compressor will have a delayed start usually 3 minutes before unit starts to cool.

N.B: *Any interruption to the power supply will cause the unit to delay compressor start up.*

- For simply recirculating air, choose the FAN mode. Choose any of the three fan speeds by pressing FAN button.

N.B: Temperature button is invalid in Fan only mode.

HEAT

- To heat, press MODE button to highlight HEAT.
- Select desired set point temperature by pressing TEMP buttons up or down. It is recommended that AUTO fan speed by selected.
- After the delay, the compressor will start. Usually the fan will stop and will not re-energize until the heat exchanger has warmed and then the fan will start to blow warm air.

DRY

- The DRY mode is used when the room temperature is close to comfortable but you wish to dehumidify.
- Press MODE button to highlight DRY.
- Set the temperature to desired set point. *N.B: the fan speed is locked in LOW*.
- The compressor will cycle on and off at approximate intervals of 6 minutes to extract moisture from the air.

SLEEP

- With the unit operating in heat or cool mode, press sleep button to highlight the sleep light. The unit over the next hour will automatically raise the set point by 1c. Conversely in heat mode, the set point will be lowered 1c.
- The TIMER may be used to turn off the unit in the future (up to 24 hours) OR may be used to turn on the unit up to 24 hours in the future.
- Press TIMER button once and the display will flash. Within 3 seconds, press the timer button until you have set desired time into the future to turn unit off. A subsequent press of the timer button will allow the time to start the unit to be programmed.

LOCKING

- This provides a means of locking in the mode and fan settings. To lock, press temp down key simultaneously with MODE button. Hold for 3 seconds and the lock indicator will light. To unlock, repeat above procedure.

DISPLAY SETTING

- To change readout from Celsius to Fahrenheit or vice versa: Press temp down key simultaneously with the Fan key.

POSSIBLE FAULTS AND REMEDYS

Control Pad will not illuminate when ON/OFF button is pressed	- Check circuit breaker is on - Control cable may be unplugged between outside unit and inside fascia - Check power supply to van
Unit does not cool	- Ensure mode has be switched to cooling (check green LED) - Thermostat set point must be below room temperature NB: The compressor has a 3 minute delay before starting
Unit does not heat	- Ensure mode has be switched to heat (check green LED) - Thermostat set point must be above room temperature NB: The compressor has a 3 minute delay before starting - In very cold conditions the unit will take more time to start producing warm air
Insufficient cooling capacity	- Ensure return air filters are clean - Operate the unit on high fan speed to obtain maximum capacity - Ensure all windows, doors, skylights and hatches are closed and curtains/awnings used to reduce heat load, check for adequate insulation in roof & walls
An error code is displayed on control panel (E1 to E5)	- Contact Aircommand service department